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Supporting Information

for

Decontamination from water pollutants and pathogens by electrospun nanofibers doped with heavy-atom-free borafluorene-BODIPY photosensitizers

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Additional experimental data

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1 NMR

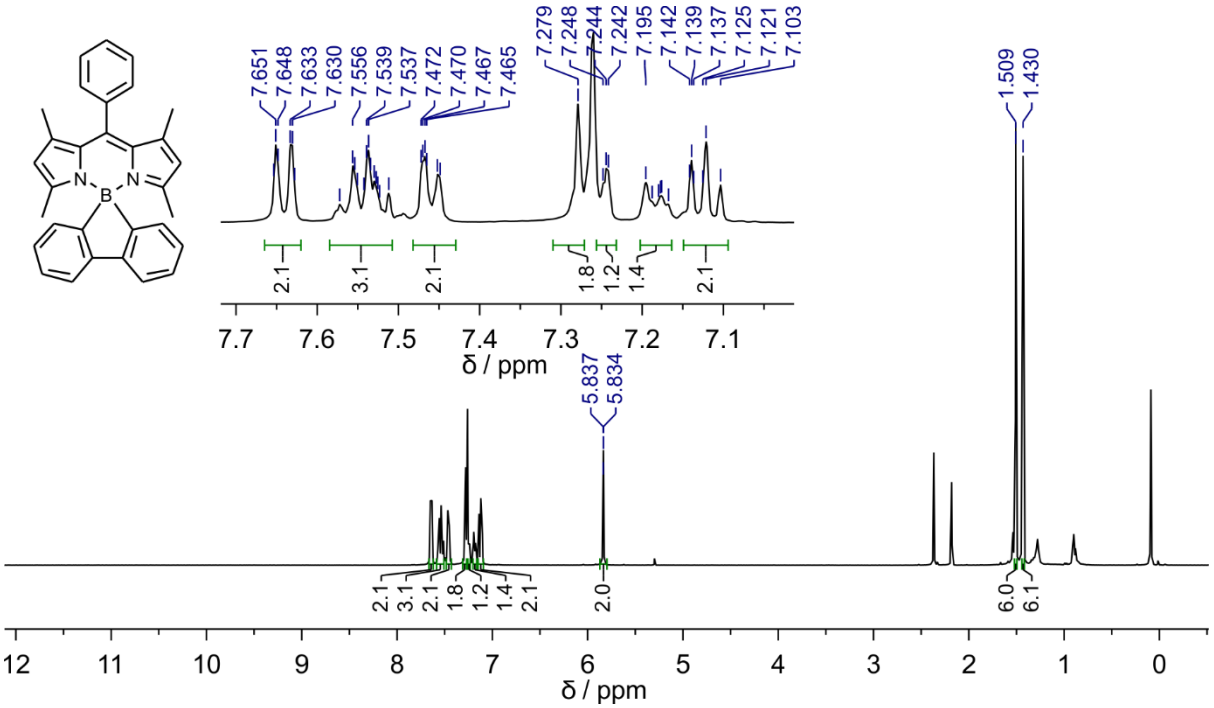

Figure S1: ^{1}H NMR (400 MHz) spectrum of **1** in $CDCl_3$.

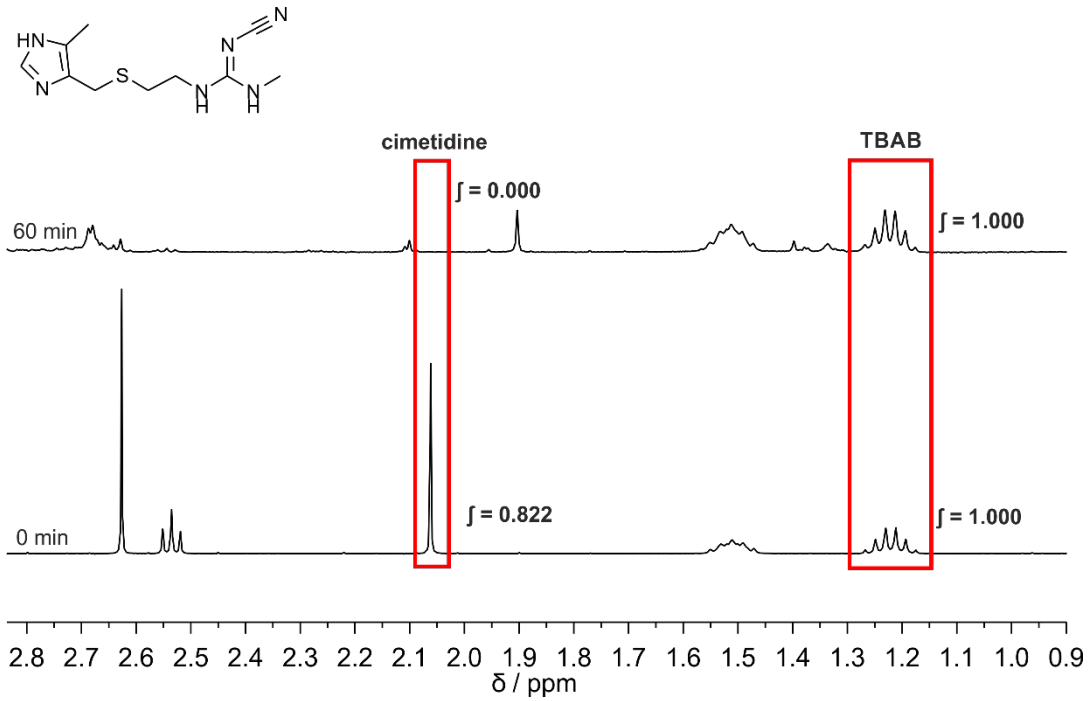

Figure S2: Analysis of the ^{1}H NMR spectrum (400 MHz, $CDCl_3$) for the photocatalytic oxidation of cimetidine with **1** (0.15 wt %)@PCL (H_2O, 26 W white LED, 25 °C). Integrals used for determination of reaction conversion are marked.

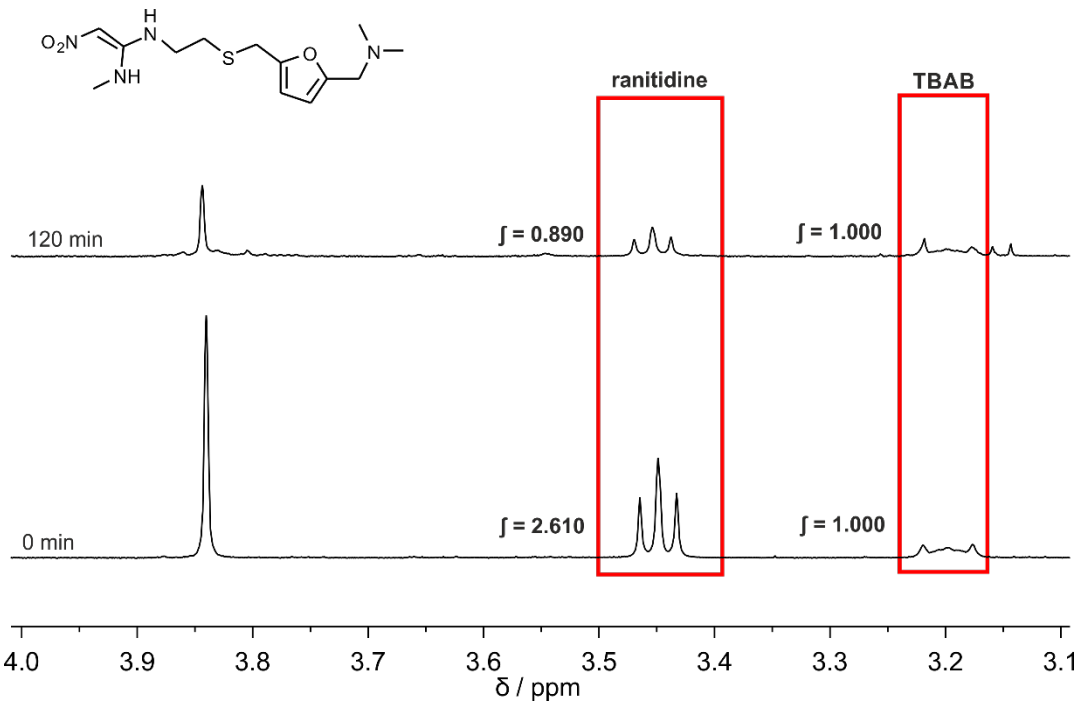

Figure S3: Analysis of the ^{1}H NMR spectrum (400 MHz, $CDCl_3$) for the photocatalytic oxidation of ranitidine with **1** (0.15 wt %)@PCL (H_2O, 26 W white LED, 25 °C). Integrals used for determination of reaction conversion are marked.

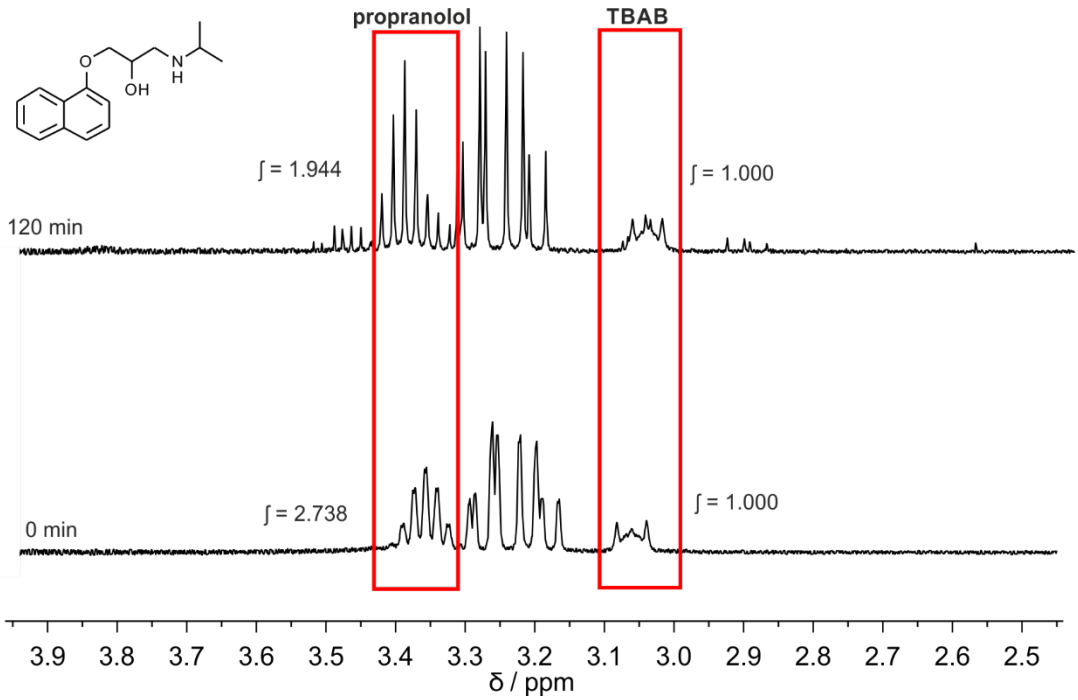

Figure S4: Analysis of the ^{1}H NMR spectrum (400 MHz, $CDCl_3$) for the photocatalytic oxidation of propranolol with **1**(0.15 wt %)@PCL (H_2O, 26 W white LED, 25 °C). Integrals used for determination of reaction conversion are marked.

2 Photocatalytic studies

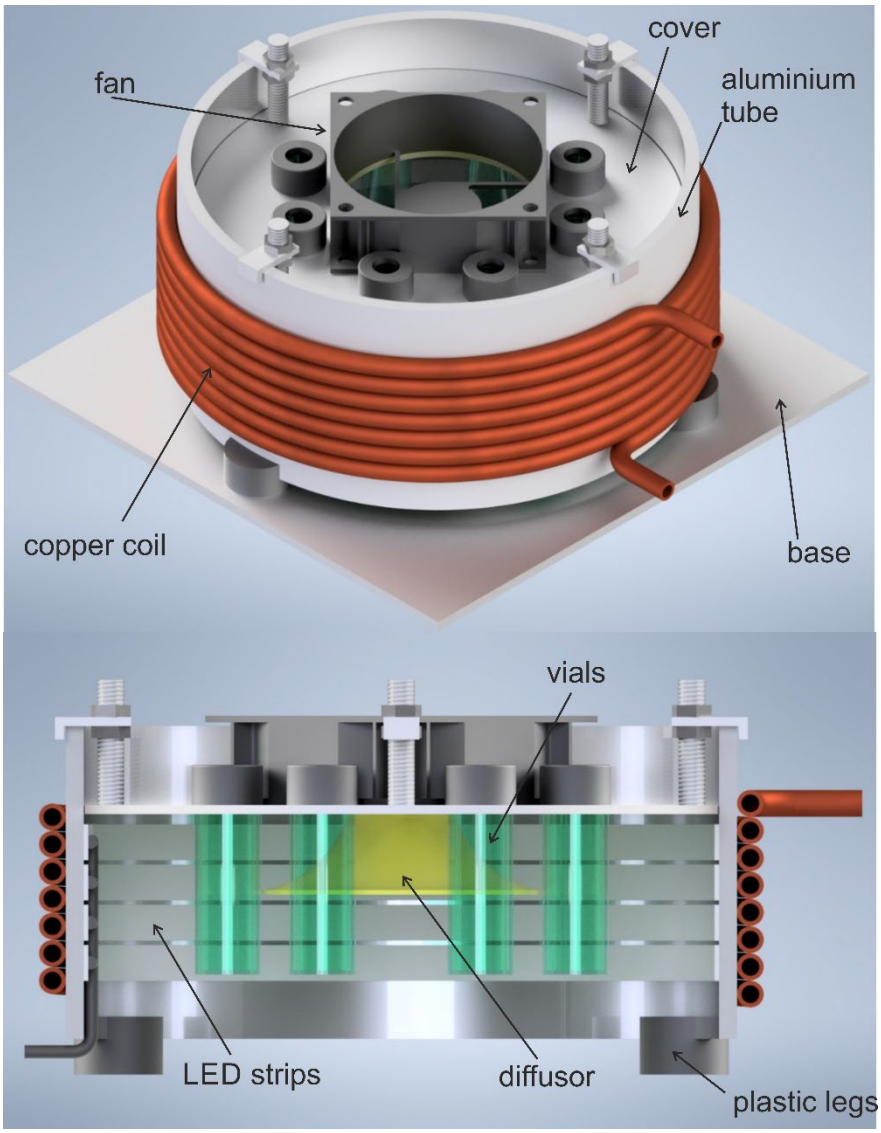

Figure S5: Model of photoreactor used in the photocatalytic degradation of pharmaceuticals. Figure S5 was adapted from [1], (© 2021 P. H. Marek-Urban et al., Published by American Chemical Society, distributed under the terms of the Creative Commons Attribution 4.0 International License, https://creativecommons.org/licenses/by/4.0).

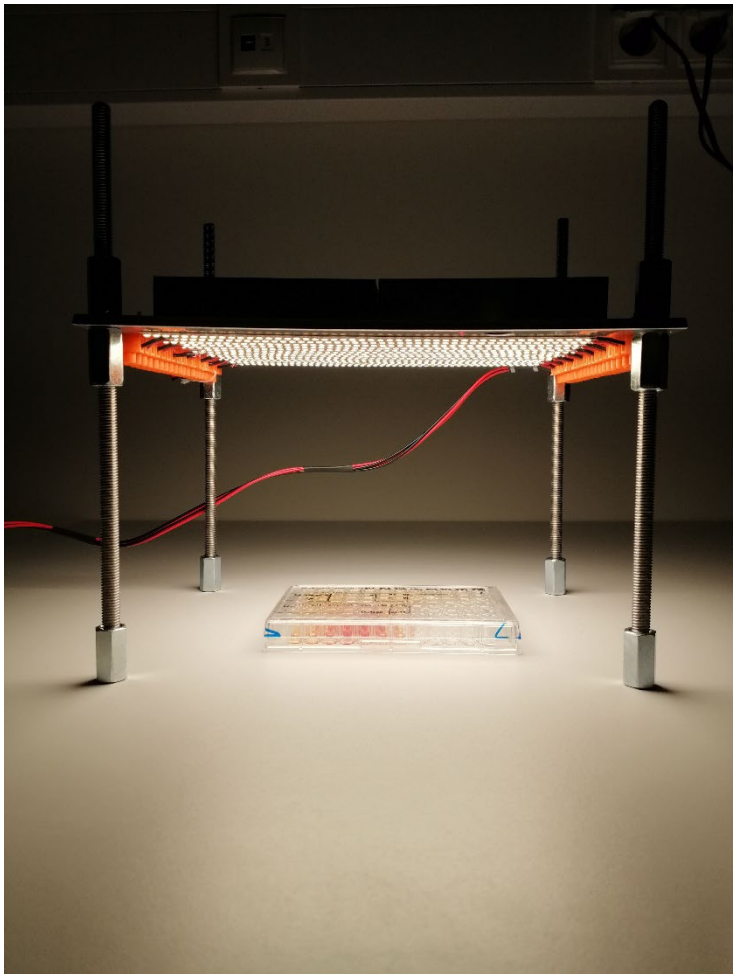

Figure S6: Photoreactor used in the microbiological experiments.

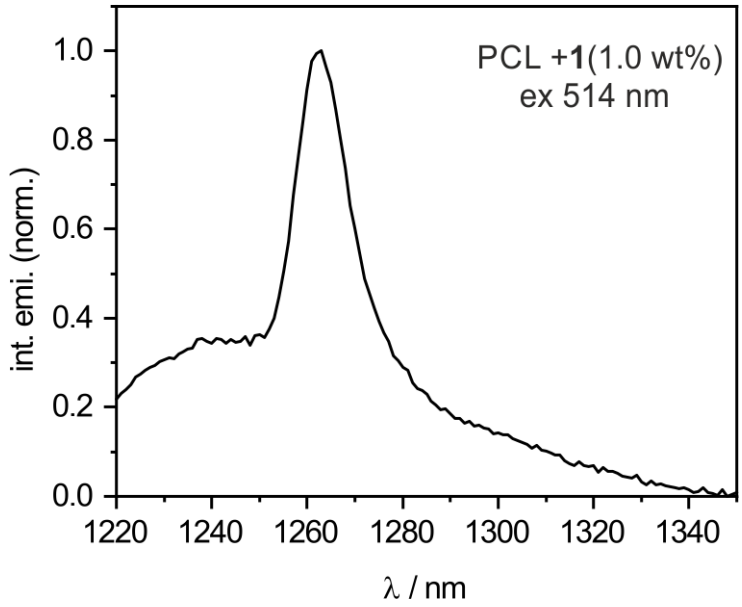

Figure S7: Emission spectrum of singlet oxygen for PCL@**1**(1.00 wt %) excited at λ_{ex} = 520 nm.

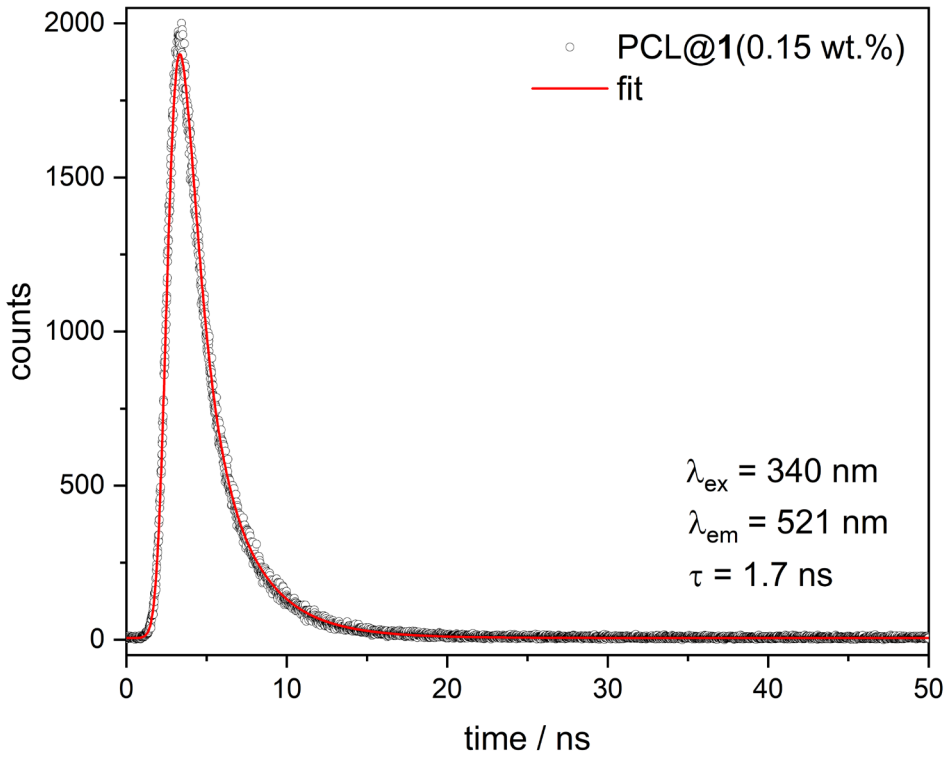

Figure S8: Fluorescence decay of PCL@**1**(0.15 wt %) at λ_{em} = 521 nm.

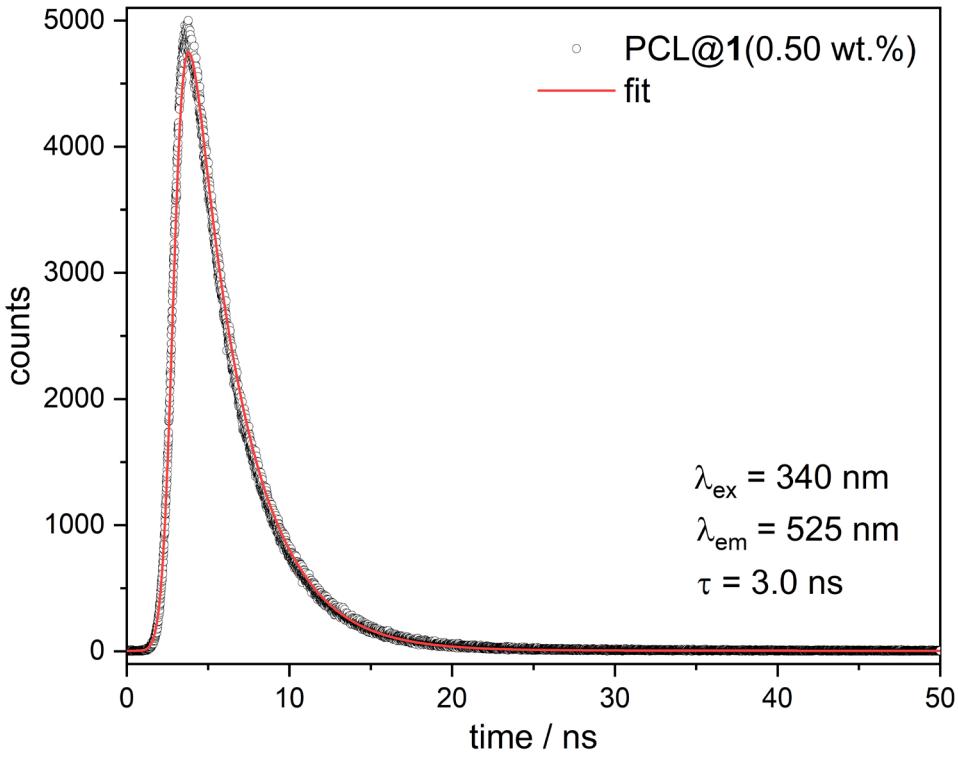

Figure S9: Fluorescence decay of PCL@**1**(0.50 wt %) at λ_{em} = 525 nm.

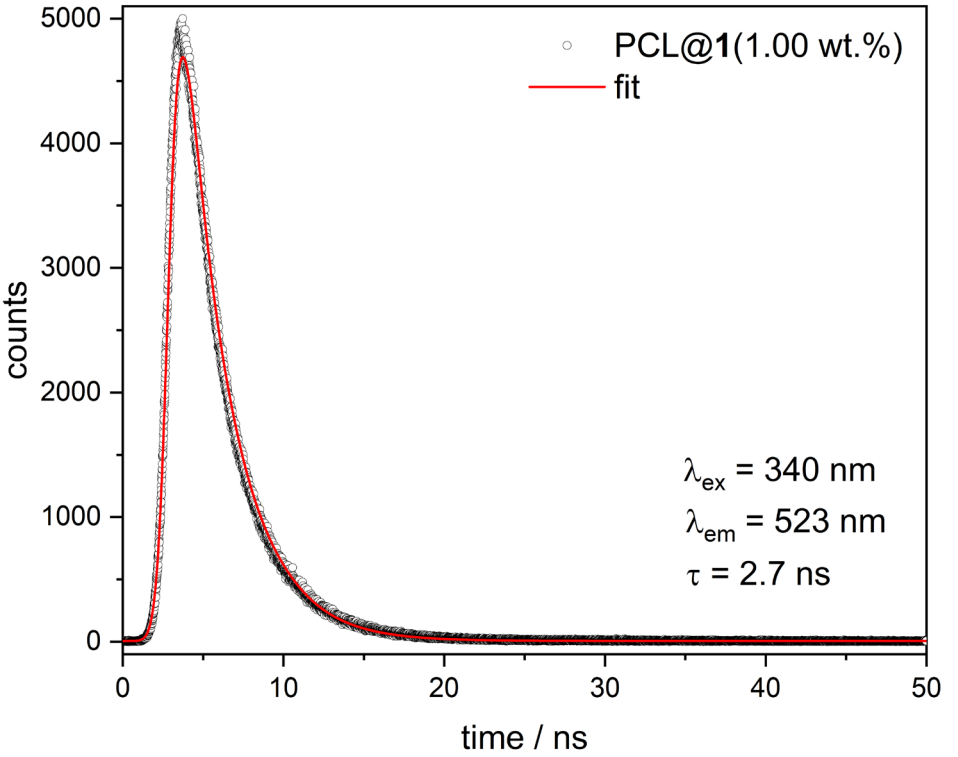

Figure S10: Fluorescence decay of PCL@**1**(1.00 wt %) at λ_{em} = 523 nm.

References

1. Marek-Urban, P.H.; Urban, M.; Wiklińska, M.; Paplińska, K.; Woźniak, K.; Blacha-Grzechnik, A.; Durka, K. *J. Org. Chem.* **2021,** *86,* 12714–12722. doi:10.1021/acs.joc.1c01254